

REMARKS

Claims 1, 2, 5 – 10, 13 – 15 and 21 - 24 are pending in the present application. Claims 3 and 11 were previously canceled. Claims 4, 12 and 16 – 20 are canceled by the present amendment, and claims 21 – 24 are newly added.

In section 3 of the Office Action, claims 1, 2, 4 – 10 and 12 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,461,310 to Cheung et al. (hereinafter "the Cheung et al. patent") in view of U.S. Patent No. 6,353,904 to Le (hereinafter "the Le patent"). Applicant canceled claims 4, 12 and 16 – 20, thus obviating the rejection of these claims. Of the remaining rejected claims, i.e., claims 1, 2, 5 – 10, and 13 – 15, three are independent, namely claims 1, 10 and 15. Applicant amended claims 1, 10 and 15 to clarify an aspect of the claims that is neither disclosed nor suggested by the cited combination of Cheung et al. and Le patents.

Claim 1 provides for an automated test equipment. The equipment includes, *inter alia*, (i) a plurality of per-pin testing units, (ii) an assigning component that assigns a first subset of the plurality of per-pin testing units to a first ATE-port, and a second subset of the plurality of per-pin testing units to a second ATE-port, and (iii) a programming component that programs the first ATE-port with a first program, and programs the second ATE-port with a second program, wherein the first and second ATE-ports are sequenced independently of one another during execution of the first and second programs.

FIG. 8 of the present application is a schematic of an exemplary embodiment of a per-pin testing unit 700i that includes a test processor 810 that interfaces to access control logic 890. The specification, in a passage at page 16, line 5 – page 17, line 4 describes several features of the per-pin testing unit of FIG. 8. For example, at page 16, line 14, the specification describes test processor 810 as having a sequencer, and that access control logic 890 is part of an interface and supports broadcasting to other per-pin testing units that constitute an ATE-port. FIG. 5 illustrates, and a passage at page 11, line 14 – page 12, line

25 describes, an exemplary arrangement of ATE-ports with programs being sequenced independently of one another.

The Cheung et al. patent is directed toward an ATE system. Test data is loaded into an individual pin slice circuit as a vertical word such that all of the bits of the vertical word correspond to the individual pin, thus, allowing characteristics of an individual pin test sequence to be varied independently of other pins (Abstract). FIG. 1 of the Cheung et al. patent is an illustration of the ATE situated between a workstation 12 and a device under test (DUT) 14 (col. 3, lines 19 – 22). The ATE includes an event sequencer 24, which generates timing and provides a signal through a driver 26 to DUT 14 (col. 3, lines 34 – 36). A global sequencer 40 provides clocks to event sequencer 24, and in addition, addresses are provided on lines 34 to select a stored sequence in event sequencer 24 (col. 3, lines 41 – 45). Global sequencer 40 is responsible for sequencing the provision of data to the test system (col. 7, lines 40 – 41).

Whereas in the Cheung et al. patent, global sequencer 40 is responsible for sequencing the provision of data to the test system, all of event sequencers 24 are **sequenced together**, under the control of global sequencer 40, and **none of event sequencers 24 is sequenced independently of any other event sequencer 24**. Therefore, the Cheung et al. patent neither discloses nor suggests that first and second ATE-ports are sequenced independently of one another during execution of first and second programs, as recited in claim 1.

The Le patent is directed toward a method of automatically generating a test program (Abstract). Applicant respectfully submits that the Le patent neither discloses nor suggests that first and second ATE-ports are sequenced independently of one another during execution of first and second programs, as recited in claim 1.

In view of the foregoing, Applicant submits that the Cheung et al. and Le patents, whether considered independently or in combination with one another, neither disclose nor

suggest all of the features of claim 1. Accordingly, claim 1 is patentable over the cited combination of the Cheung et al. and Le patents.

Claims 2 and 5 – 9 depend from claim 1. By virtue of this dependence, claims 2 and 5 – 9 are also patentable over the cited combination of the Cheung et al. and Le patents.

Claim 10 is an independent claim and includes a recital similar to that of claim 1, as described above. Therefore, claim 10, for reasoning similar to that provided in support of claim 1, is also patentable over the cited combination of the Cheung et al. and Le patents.

Claims 13 and 14 depend from claim 10. By virtue of this dependence, claims 13 and 14 are also patentable over the cited combination of the Cheung et al. and Le patents.

Claim 15 is an independent claim and includes a recital similar to that of claim 1, as described above. Therefore, claim 15, for reasoning similar to that provided in support of claim 1, is also patentable over the cited combination of the Cheung et al. and Le patents.

Applicant respectfully requests reconsideration and withdrawal of the section 103(a) rejection of 1, 2, 5 – 10, and 13 – 15.

As mentioned above, Applicant amended claims 1, 10 and 15 to clarify a feature of the claims that is neither described nor suggested by the art of record. Applicant also amended 1, 10 and 15 to delete recitals that do not appear to be necessary for patentability. Additionally, Applicant amended claims 2, 6 and 7 for consistency with claim 1. None of the amendments is intended to narrow the meaning of any term of the claims, and as such, the doctrine of equivalents should be available for all of the elements of all of the claims.

Applicant added claims 21 - 24 to even further provide the claim coverage that Applicant appears to deserve based on the prior art that was cited by the Examiner. A

favorable consideration that also results in the allowance of claims 21 - 24 is earnestly solicited.


Applicant canceled claims 4, 12 and 16 – 20 in order to reduce the cost that Applicant would have otherwise have born because of the addition of claims 21 – 24.

In view of the foregoing, Applicant respectfully submits that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Respectfully submitted,

Date

3-9-05



Paul D. Greeley, Esq.
Reg. No. 31,019
Attorney for the Applicant
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.
One Landmark Square, 10th Floor
Stamford, CT 06901-2682
Tel: 203-327-4500
Fax: 203-327-6401